

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE	DOCKET NO. XY - Lodo - USNP	SERIAL NO. 09/582809
	APPLICANT (S) George E. Seidel, Lisa Herickhoff, John Schenk	
	FILING DATE	ART UNIT 3736

INFORMATION DISCLOSURE CITATION

I. U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
<i>JS</i>	RE 32,350	02/10/87	Bhattacharya	204	180.1	11/22/74
	3,687,806	08/29/72	Van den Bovenkamp	195	1.3	11/04/69
	3,829,216	08/13/74	Persidsky	356	36	10/02/72
	3,894,529	07/15/75	Shrimpton	128	1 R	04/10/69
	4,009,260	02/22/77	Ericsson	424	105	12/11/74
	4,067,965	01/10/78	Bhattacharya	424	105	12/17/75
	4,083,957	04/11/78	Lang	424	78	02/04/76
	4,085,205	04/18/78	Hancock	424	105	01/24/77
	4,092,229	05/30/78	Bhattacharya	204	180 R	10/20/76
	4,155,831	05/22/79	Bhattacharya	207	299 R	02/23/78
	4,191,749	03/04/80	Bryant	424	105	10/11/77
	4,225,405	09/30/80	Lawson	204	180 R	08/16/78
	4,276,139	06/30/81	Lawson	204	180 R	10/09/79
	4,339,434	07/13/82	Ericsson	424	105	08/17/81
	4,362,246	12/07/82	Adair	209	3.3	07/14/80
	4,448,767	05/15/84	Bryant	424	85	02/15/80
	4,511,661	04/16/85	Goldberg	436	503	12/30/83
	4,680,258	07/14/87	Hammerling et al	435	7	08/09/83
	4,698,142	10/06/87	Muroi et al	204	182.3	07/31/85
	4,749,458	06/07/88	Muroi et al	204	182.3	03/02/87
	4,999,283	03/12/91	Zavos et al	435	2	08/18/89
	5,021,244	06/04/91	Spaulding	424	561	05/12/89
	5,135,759	08/04/92	Johnson	424	561	04/26/91
	5,346,990	09/13/94	Spaulding	530	350	03/12/91
	5,439,362	08/08/95	Spaulding	424	185.1	07/25/94
	5,514,537	05/07/96	Chandler	435	2	11/28/94
	5,589,457	12/31/96	Wiltbank	514	12	07/03/95
<i>JS</i>	5,660,997	08/26/97	Spaulding	435	7.21	06/07/95

II.

FOREIGN PATENT DOCUMENTS

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	DOCUMENT NO	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
38	WO 96/12171	10/13/95	United States	6	—		

III. OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

38	✓	Amann, Rupert P. and Seidel, George E., Jr., "Prospects For Sexing Mammalian Sperm," Colorado Associated University Press, Animal Reproduction Laboratory College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, CO, 80523, 1982
	✓	Blanchard, T. and Dickson, V., Stallion Management, "The Veterinary Clinics of North America, Equine Practice", Vol. 8, No. 1, April 1992, pp 207 - 218.
	✓	Catt, et al., "Assesment of Ram and Boar Spermatozoa During Cell-Sorting by Flow Cytometry", Reproduction Dom Animal, Vol. 32, 1997, pp 251-258.
	✓	Cran, D.G., W.A.C. McKelvey, M.E. King, D.F. Dolman, T.G. McEvoy, P.J. Broadbent and J.J. Robinson, Mastercalf, Craibstone, Bucksburn, Aberdeen, "Production of Lambs by Low Dose Intrauterine Insemination With Flow Cytometrically Sorted and Unsorted Semen," AB21 9TN, UK Scottish Agricultural College, Craibstone, Bucksburn, Aberdeen. AB21 9YA, UK, Theriogenology, Page 267, date unknown.
	✓	Hawk, H.W., et al., "Fertilization Rates in Superovulating Cows After Deposition of Semen on the Infundibulum Near the Uterotubal Junction or After Insemination with High Numbers of Sperm", XP-002103478, Theriogenology, May 1988, Vol. 29, No. 5, pp 1131-1142.
	✓	Jafar, et al., "Sex Selection in Mammals: A Review", Theriogenology, vol. 46, 1996, pp 191-200.
	✓	Johnson, L.A., and Pinkel, D., "Modification of a Laser-Based flow Cytometer for High-Resolution DNA Analysis of Mammalian Spermatozoa", Cytometry 7, 1986, pp 268 - 273.
	✓	Johnson, L.A., et al., "Sex Preselection in Rabbits: Live Births from X and Y Sperm Separated by DNA and Cell Sorting", Execptional Paper-Rapid Publication, XP-002103476, Biology of Reproduction 41, 199-203, 1989, pp 199-203.
	✓	Johnson, "Gender preselection in Mammals: An overview", Dtsch. tierarztl. Wschr, Vol. 103, Aug./Sep. 1996, pp 288-291.
	✓	Karabinus, et al., "Effects of Egg Yolk-Citrate and Milk Extenders on Chromatin Structured Viability of Cryopreserved Bull Sperm", Journal of Dairy Science, Vol. 74, No. 11, 1999, pp 3836-3848.
	✓	Macmillan, K.L. and A.M. Day, "Prostaglandin F2a - A Fertility Drug In Dairy Cattle?", Ruakura Animal Research Station, Private Bag, Hamilton, New Zealand, Theriogenology, September 1982, Vol. 18 No. 3, pages 245-253
	✓	McKinnin, A. and Voss, J., "Equine Reproduction", Lea & Febiger, Philadelphia, 1993, pp 291, 299 - 302, 345 - 348, 739 - 797.
	✓	McNutt, et al., "Flow Cytometric Sorting of Sperm: Influence on Fertilization and Embryo/Fetal Development in the Rabbits", Molecular Reproduction and Development, Vol. 43, 1996, pp 261-267.
	✓	Meinert, C., et al., "Advancing the time of ovulation in the mare with a short-term implant releasing the GnRH analogue deslorelin", Equine Veterinary Journal, 25, 1993, pp 65 - 68.
	✓	Nowshari, et al., "Superovulation of Goats with Purified pFSH Supplemented with Defined AMounts of pLH", Theriogenology, Vol 43, 1995, pp 797-802.
	✓	Parent US Application 09/001,394, entitled "Sheath Fluids and Collection Systems for Sex-Specific Cytometer Sorting of Sperm", filed on December 31, 1997, 87 total pages which includes four drawings.
	✓	Parent US Application 09/001,454, entitled "System for Improving Yield of Sexed Embryos in Mammals", filed on January 29, 1998, 59 total pages which includes drawings.
	✓	Parrish, J.J., J. Susko-Parrish, M.A. Winer, and N.L., "Capacitation of Bovine Sperm by Heparin," First, Department of Meat and Animal Science, University of Wisconsin, Madison, WI 53706, Biology Of Reproduction 38, 1988, pp 1171-1180.
	✓	Pickett, B.W., and Shiner, K.A., "Recent developments in artificial insemination in horses", Livestock Production Science, 40, 1994, pp 31 - 36.
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B8	Seidel, G.E., Jr., C.H. Allen, Z. Brink, M. D. Holland, and M.B. Cattell, "Insemination Of Heifers With Very Low Numbers Of Frozen Spermatozoa.", Colorado State University, Fort Collins, Atlantic Breeders Cooperative, Lancaster, PA, DUO Dairy, Loveland, CO, July 1996.
1	Seidel, G.E., Jr., C.H. Allen, L.A. Johnson, M.D. Holland, Z. Brink, G.R. Welch, J.K. Graham and M.B. Cattell, "Uterine Horn Insemination of Heifers With Very Low Numbers of Nonfrozen and Sexed Spermatozoa.", Animal Reproduction and Biotechnology Laboratory Colorado State University, Atlantic Breeders Cooperative, Lancaster, PA 17601, Germplasm and Gamete Physiology Laboratory ARS, USDA, Beltsville, MD 20705, DUO Dairy, Loveland, CO 80538, Theriogenology 48: 1255-1264, 1997.
1	Seidel, G.E., Jr., C.H. Allen, Z. Brink, J.K. Graham, and M.B. Cattell, "Insemination of Holstein Heifers With Very Low Numbers Of Unfrozen Spermatozoa.", Colorado State University, Fort Collins, Atlantic Breeders Cooperative, Lancaster, PA., DUO Dairy, Loveland, CO. July 1995.
1	Seidel, G.E., Jr., L.A. Johnson, C.A. Allen, G.R. Welch, M.D. Holland, Z. Brink and M.B. Cattell, "Artificial Insemination With X-and Y-Bearing Bovine Sperm", Animal Reproduction and Biotechnology Laboratory, Colorado State University, Fort Collins, CO; Germplasm and Gamete Physiology Lab, ARS, USDA, Beltsville, MD; Atlantic Breeders Coop, Lancaster, PA; DUO Dairy, Loveland, CO, USA January 1996.
1	Squires, E., "Simultaneous Analysis of Multiple Sperm Attributes by Flow Cytometry", Diagnostic Techniques and Assisted Reproductive Technology, The Veterinary Clinics of North America, Equine Practice, Vol. 12, No. 1, April 1996, pp127 - 130.
1	Vazquez, J. et al., "Nonsurgical Uterotubal Insemination in the Mare", Proceedings of the 44th Annual Convention of the American Association of Equine Practitioners, Baltimore, Maryland, December 6-9, 1998, Vol. 44, pp 68-69
1	Welch, G., et al., "Flow Cytometric Sperm Sorting and PCR to Confirm Separation of X- and Y- Chromosome Bearing Bovine Sperm", Animal Biotechnology, 6 (2), 131-139, 1995, pp 131 - 139.
B8	XP-002103478, File Biosis, 1988, one page.

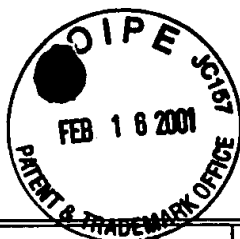
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DATE CONSIDERED

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EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE SUPPLEMENTAL INFORMATION DISCLOSURE CITATION	DOCKET NO. XY-LODO-USNP	SERIAL NO. 091582,809
	APPLICANT (S) George E. Seidel, Lisa Herickhoff, John Schenk	
	FILING DATE June 30, 2000	ART UNIT 3736

I. U.S. PATENT DOCUMENTS

DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
4,660,971	04/28/87	Sage et al.	356	39	05/03/84
4,988,619	01/29/91	Pinkel	435	30	11/30/87
5,371,585	12/06/94	Morgan et al.	356	246	11/10/92
5,483,469	01/09/96	Van den Engh et al.	364	555	08/02/93
5,466,572	11/14/95	Sasaki et al.	435	2	04/25/94
5,602,039	02/11/97	Van den Engh	436	164	10/14/94
5,690,895	11/25/97	Matsumoto et al.	422	73	12/06/96
5,700,692	12/23/97	Sweet	436	50	09/27/94
5,726,364	03/10/98	Van den Engh	73	864.85	02/10/97
5,602,349	02/11/97	Van den Engh	73	864.85	10/14/94
5,985,216	11/16/99	Rens et al.			07/24/97
6,071,689	06/06/00	Seidel et al.	435	2	01/29/98

II. FOREIGN PATENT DOCUMENTS

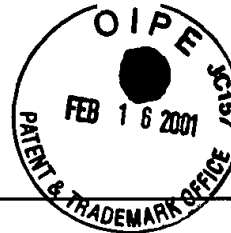
DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
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WO 98/34094	06/08/98	NZ				x
WO 99/05504	07/24/98	US				x
WO 99/33956	08/07/99	US				x
WO 99/38883	05/08/99	US				x
WO 99/42810	26/08/99	US				x
WO 00/06193	10/02/00	US				x

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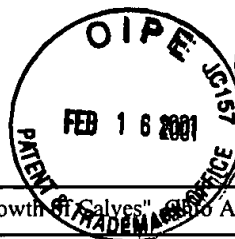
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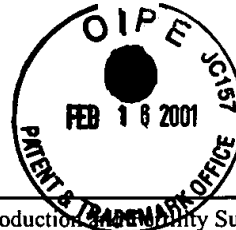
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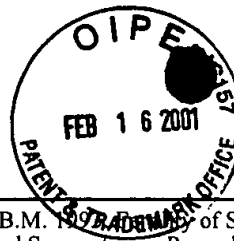
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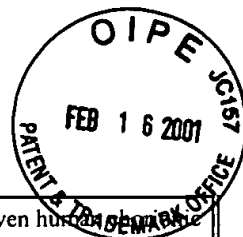


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EXAMINER

Brian Szwal

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